

Notice of Allowability

Application No.

09/505,389

Examiner

Joseph D. Anthony

Applicant(s)

KWEON ET AL.

Art Unit

1714



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☐ This communication is responsive to _____.
2. ☒ The allowed claim(s) is/are 1-4.
3. ☒ The drawings filed on 16 February 2000 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

Joseph D. Anthony
Primary Examiner
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EXAMINER'S AMENDMENT

1. The application has been amended as follows:

In claim 1, line 8 delete "um." and insert therefor -um;--.

In claim 3, line 7 delete "um." and insert therefor -um;--.

2. The following is an examiner's statement of reasons for allowance:

Independent claim 1 and 3 have been amended because it is improper to have "period" in the middle of a claim. The "period" has thus been replaced with a "semi-colon". The phone restriction requirement made on 2/9/04 wherein Eric S. Hyman elected Group I, claims 1-2 is acknowledge. Nevertheless, non-elected claims 3-4 have been rejoined with claims 1-2. As such, claims 1-4 (all the claims in the application) are deemed to be allowable.

The closest piece of prior-art is Kweon et al. U.S. Patent Number 6,372,385 which shares two common inventors with applicant's pending application. Like applicant's invention, Kweon et al teaches positive active materials, such as LiCoO_2 , which are coated with a metal oxide, see abstract. The positive active material have a particle size range of between 0.1 and 100um, see column 6, lines 19-22. The coating process is one of using a metal alkoxide solution to coat the positive active material followed by heat treating the

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coated product to convert the coating into the metal oxide, see examples 9-10 and 14-17. Applicant's claims are patentable distinct over the disclosure of Kweon et al 6,372,385 in that applicant's claims require a bi-modal particle size distribution for the positive active material (i.e. primary particles within the size range of 1 to 5 μm and secondary particles within the size range of 10 to 30 μm). The Kweon et al patent has no disclosure of any kind to any such bi-modal particle size range for the positive active material, and thus has no disclosure to applicant's particular claimed positive active material bi-modal particle size range.

The closest piece of non-prior-art (do to effective filling date issues only) is Patent Application Publication Number US 2002/0110736 to Kweon et al., which shares one common inventor with applicant's pending application. Kweon et al teaches teaches positive active materials, such as LiCoO_2 , which are coated with a metal oxide, see abstract. The positive active material have an average secondary particle size range of between 1 and less than 10 μm , and an average primary particle size range of 1 to 3 μm , see abstract and claims and examples. The coating process is one of using a metal alkoxide solution to coat the positive active material followed by heat treating the coated product to convert the coating into the metal oxide. Kweon et al is not being used in a provisional obvious type double patenting rejection, a 102(f)/103 and/or a 102(g)/103 type rejection over applicant's claims 1-2, for the following reasons: 1) As claimed, Kweon et al's average secondary and average primary positive active material particle size

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ranges extensively overlap each other. As such, Kweon et al's invention directly encompasses non-bi-modal particle size ranges for the positive active material unlike applicant's claimed invention which directly requires in all cases a bi-modal particle size distribution, and 2) Kweon et al directly limits the secondary average particle size range to less than 10 μm , which is outside of and positively excludes applicant's required secondary particle size range of between 10 and 30 μm .

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Prior-Art Cited But Not Applied

3. Any prior-art reference which is cited on FORM PTO-892 but not applied, is cited only to show the general state of the prior-art at the time of applicant's invention.

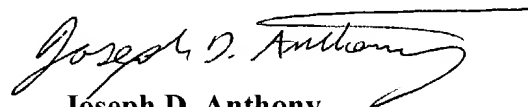
Examiner Information

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Joseph D. Anthony whose telephone number is (571) 272-1117. This examiner can normally be reached on Monday through Thursday from 8:00 a.m. to 6:30 p.m. in the eastern time zone. If attempts to reach the examiner are unsuccessful, the examiner's supervisor, Vasu Jagannathan, can be

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reached on (571) 272-1119. The centralized FAX machine number is (703) 872-9306.

All other papers received by FAX will be treated as Official communications and cannot be immediately handled by the Examiner.



Joseph D. Anthony
Primary Patent Examiner
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2/11/04